



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,507	08/18/2003	Rinze Benedictus	APV31646	1687
24257	7590	09/20/2006	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP			MORILLO, JANELL COMBS	
1615 L STREET, NW				
SUITE 850			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			1742	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/642,507	BENEDICTUS ET AL.
	Examiner	Art Unit
	Janelle Combs-Morillo	1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 February 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3,4,7-31 and 38-46 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1,3,4,7-31 and 38-46 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 2, 2006 has been entered.

Claim Objections

2. Claim 41 is objected to because of the following informalities: said claim refers to "Fe is at most 0.6%", which appears to be a typo, 0.06% may have been intended. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7-9, 11, 13-15, 17-19, 24-29, 40, 42, 45, 46 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rioja (US 6,562,154).

Rioja teaches a Al-Cu alloy rolled product comprising (in weight%): 4.08% Cu, 0.29% Mn, 1.36% Mg, 0.12% Zr, 0.02% Fe, 0.01% Si, balance aluminum (ex. 354-371, Table 2) which

falls within the alloying ranges of instant claims 1, 7-9, 11, 13-15, 17-19, 40, 42. Additionally, example 354-381 falls within the ranges of claims 1,7-9,11,13-15,17-19,40,42,46. Rioja teaches that alloying elements Mn and Zr form dispersoids (column 5 lines 25, 32) with help control grain growth and recrystallization. Rioja teaches said alloy is in the form of a rolled product in a T3 type temper (col. 7 line 12).

The presently claimed characteristics of “high damage tolerant”, “improved fatigue crack growth resistance”, and dispersoids are held to be inherent in the alloy product taught by Rioja.

Rioja teaches a T3 or T36 type temper is applied to said alloy (see ex.). With regard to the process steps (“T351 temper”), it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See MPEP 2113, *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524) *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Because Rioja teaches an Al-Cu -Mg alloy product that falls within the presently claimed ranges, and because applicant has not shown that the instant process steps produce a materially different product than the alloy product taught by Rioja, it is held Rioja anticipates the presently claimed invention.

Alternatively, it would have been obvious to one of ordinary skill in the art to apply a T351 temper to the alloy of Rioja, because it is known to apply a variety of T3 type tempers to similar Al-Cu-Mg age hardenable alloys. It is held that Rioja has created a prima facie case of obviousness of the presently claimed invention.

Concerning property claims 24-25, Rioja does not mention the fatigue crack growth rate or aspect ratio. However, said properties are held to be inherent in the overlapping alloy processed in a substantially similar method of processing said alloy including steps of reheating, hot rolling, recrystallize anneal, solution heat treat, aging (column 9 lines 10-14). The examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

Concerning claim 26 and 45, Rioja teaches a substantially similar method of processing said alloy including steps of reheating, hot rolling, solution heat treating, stretching (column 6 line 14), aging, quenching, and ageing to a T3 type temper (column 9 lines 10-14). With regard to the degree of stretching mentioned in claim 45, see discussion of product by process limitations above.

Concerning claims 27-28, Rioja teaches said alloy can be made final sheets 0.01-0.25 in (0.254-6.3mm) and intermediate slabs 2 inches thick (column 8 lines 3-4).

Concerning claim 29, Rioja teaches said alloy can be processed into a sheet for aircraft fuselages (abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1742

6. Claims 1, 3, 4, 7-9, 11-20, 24-30, 38-42, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heymes et al (US 6,077,363) in view of JP 07-252574 (JP'574).

Heymes teaches a Al-Cu alloy comprising (in weight%): 3.5-5.0% Cu, 1.0-2.0% Mg, <0.25% Si, <0.25% Fe, <0.55% Mn, others <0.25% (abstract), which overlaps the presently claimed alloying ranges of Cu, Mg, Si, Fe, and Mn (claims 1, 7-9, 11-14, 39, 40, 42). Heymes teaches processing said alloy to a T351 temper (column 7 line 66). Heymes does not teach the addition of Zr and/or Cr to said alloy.

However, JP'574 teaches the addition of 0.05-0.3% Zr and/or 0.05-0.3% Cr to substantially similar Al-Cu alloys increases toughness (see [0011]-[0013] of translation). It would have been obvious to one of ordinary skill in the art to have added Zr and/or Cr to the Al-Cu-Mg alloy taught by Heymes because JP'574 teaches said addition increases toughness.

Overlapping ranges have been held to be a *prima facie* case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claims 3 and 4, Heymes teaches the recrystallization at the surface, quarter, and mid thickness in Table 1 of alloy A2 (see trials 4-6). While the mid thickness exhibits a (low) recrystallization of 71%, at least 50% of said alloy product has a recrystallization of ≥ 95%. Therefore, the minimum recrystallization taught by Heymes $50\% * 71 + 50\% * 95 = 83\%$, which meets the instant limitation.

Concerning claim 15 and 38, as stated above, the combination of Heymes and JP'574 teaches the addition of 0.05-0.3% Zr.

Concerning claim 16-18, as stated above, the combination of Heymes and JP'574 teaches the addition Cr and/or Zr within the presently claimed range (see [0011]-[0013] of translation, see also Table 1).

Concerning claim 19, Heymes does not teach the addition of Ag, and therefore is held to be substantially Ag free.

Concerning claim 20, Heymes teaches example A2 has 0.10% Zn and 0.02% Ti, which meets the instant limitation.

Concerning property claims 21-25, Heymes does not mention the fatigue crack growth rate or aspect ratio. However, Heymes teaches said alloy exhibits excellent fatigue resistance (column 2 line 56). Additionally, Heymes teaches a substantially similar method of processing said alloy including steps of reheating, hot rolling, aging, quenching, stretching, and age hardening (column 6 lines 10-14). The examiner asserts that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). “When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Because Heymes teaches substantially similar processing steps performed on an alloy that falls within the instant alloying ranges, it is held that the same properties (aspect ratio, fatigue crack growth rate) would be expected to be present.

Concerning claim 26, Heymes teaches a substantially similar method of processing said alloy including steps of reheating, hot rolling, aging, quenching, stretching, and age hardening to a T351 temper (column 6 lines 10-15, column 7 line 66).

Concerning claims 27-28, Heymes teaches said alloy can be made into heavy >20mm (column 4 lines 66-67) thick or average 3-12mm thick sheet (column 1 lines 5-6).

Concerning claim 29, Heymes teaches said alloy can be processed into a sheet for aircraft fuselages (column 2 line 47).

Concerning instant claim 30, it would have been obvious to one of ordinary skill in the art to use said alloy as an aircraft wing member, substantially as presently claimed, because Heymes teaches said Al-Cu alloy has excellent strength and toughness properties and can be used in aircraft construction (column 1 lines 15-16).

Concerning claim 41, Heymes teaches processing said alloy to a T351 temper (column 7 line 66).

7. Claims 3, 4, 7-10, 12, 16, 20, 31, 39, 41, 43, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rioja (US 6,562,154).

Rioja is discussed in paragraphs above.

Rioja teaches a Al-Cu alloy comprising (in weight%): 3.8-4.4% Cu, 1.0-1.6% Mg, 0.3-0.7% Mn 0.09-0.12% Zr (see Rioja at cl. 5), typically 0.04% Si (Table 1), typically 0.04% Fe (see Table 1), up to 1% Zn, which overlaps or touches the boundary of the presently claimed alloying ranges of Cu, Mg, Si, Fe, Mn, and Zr (claims 7-10, 12, 20, 31, 39, 43, 44). Rioja teaches that alloying elements Mn and Zr form dispersoids (column 5 lines 25, 32) with help control

Art Unit: 1742

grain growth and recrystallization. Rioja teaches said alloy is in the form of a rolled product in a T3 type temper (col. 7 line 12).

Overlapping ranges have been held to be a *prima facie* case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claims 3 and 4, Rioja teaches said alloy can have a recrystallized microstructure (column 10 line 1), if given a high temperature recrystallization anneal (column 6 lines 48-51). Therefore, the product taught by Rioja is held to be substantially recrystallized, which falls within the presently claimed ranges of >75% and >80% recrystallized.

Concerning claim 16, Rioja teaches the alloying elements that form coherent and incoherent dispersoids in Al can be added to control recrystallization and recovery (column 2 lines 1-10), including Cr and Zr. Though the preferred disclosure of Rioja is drawn to Al-Cu alloys with Zr, it would have been obvious to one of ordinary skill in the art to partially replace Zr with Cr because Rioja teaches that said elements both form dispersoids, and that combinations of dispersoid forming elements can be used (column 2 lines 9-10).

Concerning claim 20, Rioja teaches minor amounts of Sc or Li can be added (see Table 1).

Concerning instant claim 30, it would have been obvious to one of ordinary skill in the art to use said alloy as an aircraft wing member, substantially as presently claimed, because Rioja teaches said Al-Cu alloy has excellent strength and toughness properties and can be used in aerospace applications (abstract).

Art Unit: 1742

8. Claims 1, 7-15, 17-20, 24-31, 38-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karabin (US 5,865,914).

Karabin teaches an Al-Cu alloy rolled product with an unrecrystallized microstructure used for lower wing structures of commercial aircraft, said alloy comprising (in wt%): 3.6-4.2% Cu, 1.0-1.6% Mg, 0.3-0.7% Mn, 0.05-0.25% Zr, -0.05% Fe, -0.05% Si (column 2 lines 57-59), which overlaps or touches the boundary of the alloying ranges in claims 1, 7-15, 17-20, 31, 38-44, 46. Karabin teaches a T351 can be applied to said alloy (column 2 line 1). Karabin teaches dispersoids are created to strengthen the alloy (column 10 lines 2-5). Because of the overlap in alloying ranges, it is held that Karabin has created a *prima facie* case of obviousness of the presently claimed invention. Overlapping ranges have been held to be a *prima facie* case of obviousness, see MPEP § 2144.05. It would have been obvious to one of ordinary skill in the art to select any portion of the range, including the claimed range, from the broader range disclosed in the prior art, because the prior art finds that said composition in the entire disclosed range has a suitable utility.

Concerning claim 19, Karabin does not teach the addition of Ag, and therefore is held to be substantially Ag free.

Concerning claim 20, Karabin teaches minor amounts Ti can be added (see Table 2).

Concerning property claims 24-25, Karabin teaches said alloy exhibits an improved fatigue crack growth rate (Table 1). Additionally, because Karabin teaches a substantially similar method of processing (see examples) a substantially overlapping alloy composition, it is held that the same properties (fatigue crack growth rate) would be expected to be present for Karabin, as for the instant invention.

Concerning claim 26 and 45, Karabin teaches a substantially similar method of processing said alloy including steps of casting, hot rolling, solution heat treating, quenching, stretching, aging to a T351 or T39 type temper (see Examples column 9).

Concerning claims 27-28, Karabin teaches said alloy can be made final sheets typically 0.5 inch thick (column 1 line 46), which overlaps the presently claimed thickness range.

Concerning claim 30, Karabin teaches said alloy can be processed into a sheet for aircraft wing member (abstract), substantially as presently claimed. Concerning claim 29, it would have been obvious to form a fuselage sheet out of said alloy because Karabin teaches said Al-Cu alloy has excellent strength and toughness properties and can be used in aerospace applications (abstract, examples).

Response to Amendment/Arguments

9. In the response filed on February 8, 2006 applicant submitted various arguments traversing the rejections of record.
10. New rejections in view of Karabin as well as Rioja have been made, who teach substantially overlapping Al-Cu-Mg-Mn alloys with added anti-recrystallization agent Zr, see rejections above. Though independent claim 1 mentions the alloy product is in a T351 temper, which is not mentioned by Rioja, applicant has not shown the instant product by process results in a materially different product than that taught by Rioja in a T3 or T39 temper (see further discussion above). Alternatively, it would have been obvious to one of ordinary skill in the art to apply a T351 temper to the alloy of Rioja, because it is known to apply a variety of T3 type tempers to similar Al-Cu-Mg age hardenable alloys.

Art Unit: 1742

11. Applicant has overcome the 102(e) rejection in view of US'618. Though claims 21-23 are not supported by the priority document (see also discussion below), the amended Cu range in said claims does not overlap that of US'618.

12. The examiner agrees that the priority document supports the claimed invention, except for claims 21-23 (see p 11 of arguments).

13. Applicant's argument that the present invention exhibits unexpected results with respect to the prior art of Heymes has been found partially persuasive (arguments p 13-14). The examiner agrees that the closest example A4 of Heymes is substantially similar to that of AA2524, and that applicant has shown unexpectedly superior fatigue crack growth improvement over AA2524. Said unexpected results are held to be commensurate in scope with instant claims 10, 21-23, 46 (therefore, applicant has not overcome the prima facie case of obvious in view of Heymes with regard to claims 1,3,4,7-9,11-20,24-30,38-42,45, which remain rejected above).

14. Applicant's argument that the present invention is allowable over the prior art of record because JP'574 teaches higher levels of Fe and Si has not been found persuasive. Though JP'574 teaches that it is expensive to reduce Fe and Si to low levels, it is within the disclosure of Heymes, drawn to specialized aerospace applications with excellent properties, to have low Fe and Si impurity levels of Fe<0.20% and Si<0.17% (Heymes at cl. 5 and 6).

Provisional Double Patenting

15. Claims 1, 3, 4, 7-8, 11-31, 38-46 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of copending Application No. 10/639,776 (pub. No. US 2004/0060618, hereinafter US'618).

Art Unit: 1742

Although the conflicting claims are not identical, they are not patentably distinct from each other because cl. 1-2 of US'618 teach an aluminum alloy (in weight%): 4.5-5.5% Cu, 0.5-1.6% Mg, <=0.80% Mn, 0.15% max. Fe, 0.15% max. Si, 0.18% max. Zr, 0.18% max Cr, which overlaps the presently claimed ranges of Cu, Mg, Mn, Fe, Si, Zr, and Cr. Cl. 1 of US'618 mentions said alloy is substantially free of Ag (see US'618 at claim 1). US'618 at claim 21 teaches said alloy is in a T39 or T351 temper, substantially as claimed.

Concerning instant claims 3-4 and 21-23, the alloy taught by the claims of US'618 is typically: provided in the T39 condition (see US'618 at cl. 21), ≥ 80% recrystallized (see US'618 at cl 23), and exhibits a typical aspect ratio of 1:4 or less (US'618 at cl. 24).

Concerning instant claims 24-26, the claims of US'618 teaches an identical fatigue crack growth rate in cl. 26-27, as well as substantially the same working and heat treating steps performed on the instant Al-Cu alloy (see US'618 at cl. 36).

Concerning instant claims 27-30, the claims of US'618 teach said alloy product preferably has a thickness of 2.0mm-50mm (see US'618 at cl. 28-29), and is used for various aircraft applications, such as lower wing member or fuselage panels (see US'618 at cl. 30-31).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 1, 3, 4, 7-30, 38, 40, 42, 43, 45, 46 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10/642518 (pub. No. US 2004/0112480, hereinafter US'480).

Although the conflicting claims are not identical, they are not patentably distinct from each other because cl. 1-2 of US'480 teach an aluminum alloy (in weight%): 3.6-4.9% Cu, 1.0-1.8% Mg,

Art Unit: 1742

<0.30% Mn, 0.10% max. Fe, 0.1-0.4% max. Si, 0.15% max. Zr, 0.15% max Cr, which overlaps the presently claimed ranges of Cu, Mg, Mn, Fe, Si, Zr, and Cr. Cl. 1 of US'480 does not mention said alloy contains Ag. The alloy taught by the claims of US'480 is typically provided in the T39 condition (see US'480 at cl. 21).

The claims of US'480 do not teach the degree of recrystallization or aspect ratio. However, because the Al-Cu alloy product taught by the claims of US'480 substantially overlaps the presently claimed ranges, as well as the process taught by cl. 17 and 18 of US'480, then substantially the same microstructure is expected to occur.

Concerning instant claims 24-26, the claims of US'480 teaches an identical fatigue crack growth rate in cl. 14-15, as well as substantially the same working and heat treating steps performed on the instant Al-Cu alloy (see US'480 at cl. 23).

Concerning instant claims 27-30, the claims of US'480 teach said alloy product preferably has a thickness of 2.0mm-50mm (see US'480 at cl. 19-20), and is used for various aircraft applications, such as lower wing member or fuselage panels (see US'480 at cl. 21-22).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

Art Unit: 1742

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700


JCM

September 13, 2006